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WEEKLY
REPORT

Week Ending
February 4, 1967

Morbidity and Mortality

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL

EPIDEMIOLOGIC NOTES AND REPORTS CARBON MONOXIDE POISONING CONFUSED WITH BOTULISM - Savannah, Georgia

Shortly after noon on January 12, 1967, three persons (ages 54, 55, and 76) were found in a state of collapse in their small Savannah, Georgia home. An ambulance was summoned and the three were rushed to a local hospital. During the trip, which took approximately 15 minutes, oxygen therapy was administered.

On arrival at the hospital the patients were able to talk to the physician on duty, although all three were somewhat confused and one appeared quite excited. Vital signs and pupils were found to be normal but each patient complained of a dry mouth and showed generalized weakness and flaccidity. As nearly as could be determined,

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onset began around midmorning with symptoms of nausea, malaise, a feeling of "tightness" in the head, palpitations, diplopia, giddiness progressing to vertigo, weakness, a sense of constriction in the chest accompanied by dyspnea, and finally collapse.

(Continued on page 34)

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES (Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	5th WEEK ENDED		MEDIAN 1962 - 1966	CUMULATIVE, FIRST 5 WEEKS		
	FEBRUARY 4, 1967	FEBRUARY 5, 1966		1967	1966	MEDIAN 1962 - 1966
Aseptic meningitis	29	19	19	142	128	130
Brucellosis	1	3	2	15	17	22
Diphtheria	6	2	4	12	12	22
Encephalitis, primary:						
Arthropod-borne & unspecified	13	24	---	91	113	---
Encephalitis, post-infectious	13	14	---	44	64	---
Hepatitis, serum	36	26	983	174	102	4,465
Hepatitis, infectious	835	728	---	3,664	3,475	---
Malaria	53	1	1	142	26	10
Measles (rubeola)	2,205	5,857	7,994	7,798	26,003	34,392
Meningococcal infections, total	51	65	65	286	354	272
Civilian	47	---	---	265	---	---
Military	4	7	---	21	32	---
Poliomyelitis, total	---	---	---	---	1	5
Paralytic	---	---	---	---	---	3
Rubella (German measles)	849	1,154	---	2,908	4,267	---
Streptococcal sore throat & scarlet fever	11,827	10,385	10,212	54,772	46,867	44,074
Tetanus	3	1	4	13	7	16
Tularemia	---	1	3	13	18	33
Typhoid fever	9	6	6	27	24	33
Typhus, tick-borne (Rky. Mt. spotted fever)	---	---	---	4	7	3
Rabies in animals	69	58	73	352	342	318

NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax	---	Rabies in man	---
Botulism	---	Rubella, Congenital Syndrome	---
Leptospirosis: Tex.-1	4	Trichinosis: Conn.-1	8
Plague	---	Typhus, murine	---
Psittacosis	5		

CARBON MONOXIDE POISONING CONFUSED WITH BOTULISM - Savannah, Georgia

(Continued from front page)

Carbon monoxide poisoning was briefly considered as a possible diagnosis until a policeman who had helped the patients into the ambulance assured the physician that the heater in the home was working perfectly. Botulism was then considered. This possible diagnosis was reinforced by food histories elicited from the patients. A confused account was given which left the impression that precooked venison sealed in a glass jar had been given to the family several days earlier by a friend. The jar of meat was thought to have been frozen, then thawed and served cold at the evening meal prior to onset the next morning.

The physician believed treatment for botulism was indicated. Botulinum antitoxin (AB) was begun but had to be discontinued because of anaphylactic reactions in two patients which responded to adrenaline, steroids, and antihistamines. In addition to antitoxin patients received oxygen and intravenous fluids. Improvement was rapid and by morning (some 18 hours after admission) the patients were virtually well with the exception of one who continued to experience headaches and blurred vision over the next few days.

The striking improvement overnight suggested that the illness may not have been caused by botulism. Upon questioning the patients it was learned that the suspect venison, rather than being precooked, was frozen as red meat and cooked just prior to serving, thus eliminating this item as a possible source of botulism.

Further investigation revealed that the patients live in a small, tightly constructed concrete block house heated by an unvented propane gas heater located in the hallway. The day prior to onset the heater had gone out briefly but was relit after switching to an auxiliary propane tank which had been installed several days earlier. When the

family retired at 11:00 p.m. the heater was turned off. The next morning around 6:00 a.m. the 54-year-old woman relit the heater and turned it wide open since the temperature was 24°F., the coldest morning of the winter. The others got up around 7:30 a.m., opened the doors to their bedrooms to let the heat enter, and went in to breakfast. Everyone felt fine and enjoyed a hearty meal.

A short time later the woman who arose first had an onset of nausea and a "tight feeling in her head". Dyspnea became so unbearable that she rushed outdoors. Feeling better in about 10 or 15 minutes, she returned to the house where after a brief period symptoms began again. Within an hour the two others were affected. Illness progressed for several hours and when found by friends shortly after noon, all three were critically ill and in a state of collapse. The house was noted to be "hot and suffocating" at the time and the heater was turned off.

With this added perspective the original suspicion of carbon monoxide poisoning appeared to be a more reasonable diagnosis. This was confirmed when blood specimens drawn from two of the patients about 4 hours after admission to the hospital showed high levels of carboxy-hemoglobin saturation (50 percent in one and 25 percent in another). Environmental engineers from the State and County Health Departments duplicated conditions in the dwelling and found 50 ppm carbon monoxide after 30 minutes and 1,000 ppm after 4½ hours. A parakeet was visibly affected after an hour in the house when carbon monoxide concentrations were at least 1,000 ppm.

(Reported by Dr. John McCroan, Chief Epidemiologist, and Mr. Tom McKinley, Assistant Epidemiologist, Georgia Department of Public Health; Dr. Walter W. Otto, Assistant Chatham County Health Officer; and an EIS Officer.)

CURRENT TRENDS MEASLES - 1967

There has been a gradual increase in the number of measles cases reported in the United States during the first 5 weeks of 1967. The total of 2,205 cases reported for the week ending February 4 is an increase of 545 cases over the total for the previous week, but is 3,652 cases less than the 5,857 cases reported for the comparable week of 1966.

During the first 4 weeks of 1967, 5,593 cases of measles were reported. This number is the lowest total for any January according to records which date back to 1912. The current total is approximately one-fifth of the mean number of cases for the same month in the previous 5 years. Listed in Table 1 are the weekly number of cases by state for the first 4 weeks of 1967 and the totals for this 4-week period for 1967 and the preceding 5 years. Fewer measles cases were recorded in 1967 than for the previous 5 years in all areas but the West South Central and Pacific Regions.

No cases were reported from New Hampshire or Wyoming; ten other areas notified 10 cases or less. North Carolina, Oklahoma, New Mexico and Nevada have reported more cases thus far in 1967 than in any of the previous 5 years.

Texas and Washington accounted for 30 to 39 percent of the national total for each of the first 4 weeks of 1967. The distribution of cases by county within these two states is shown in Figures 1 and 2. Four counties in Texas (Bexar, Ector, Galveston, and Travis) reported 45 percent (535 of 1,181) of the state's total for the 4-week period. A similar situation existed in Washington, where during the same 4-week period, four counties (Benton, Clallam, King, and Spokane) reported 69 percent (538 of 785) of the total. For the current week ending February 4, these two states again are among the three states reporting the highest numbers of cases. Texas reported 395, Washington 271, and Kentucky (including delayed reports) notified 272.

(Text continued on page 36)

Table 1
Reported Cases of Measles, United States
Current Four Weeks and Comparable Four-Week Periods, 1962-1967

State	Week ended				4-week Total 1967	Comparable 4-week period				
	Jan. 7	Jan. 14	Jan. 21	Jan. 28		1966	1965	1964	1963	1962
United States	1,119	1,377	1,437	1,660	5,593	20,146	26,398	21,879	30,020	31,461
New England	8	16	9	14	47	277	7,109	1,157	1,272	4,956
Maine	2	2	—	1	5	31	904	114	161	939
New Hampshire	—	—	—	—	—	4	135	8	6	251
Vermont	1	—	3	—	4	109	28	311	102	45
Massachusetts	5	11	5	10	31	63	4,109	254	328	2,511
Rhode Island	—	2	—	—	2	27	831	68	116	315
Connecticut	—	1	1	3	5	43	1,102	402	559	895
Middle Atlantic	30	62	68	80	240	3,307	965	4,309	2,211	4,399
New York City	3	10	11	10	34	1,549	120	1,629	1,127	2,248
New York Up-State	13	16	21	18	68	471	348	1,013	379	1,584
New Jersey	10	19	26	22	77	302	166	716	705	567
Pennsylvania	4	17	10	30	61	985	331	951	12,504	4,457
East North Central	99	153	188	173	613	8,376	4,547	4,285	1,512	364
Ohio	7	12	16	22	57	469	1,001	658	526	251
Indiana	20	21	38	17	96	345	209	852	513	2,110
Illinois	6	12	21	23	62	1,766	147	1,489	3,129	1,127
Michigan	18	54	45	44	161	1,305	2,304	913	6,824	605
Wisconsin	48	54	68	67	237	4,491	886	373	3,039	814
West North Central	14	75	51	71	211	710	1,927	522	416	78
Minnesota	—	4	1	6	11	344	33	7	1,565	382
Iowa	3	11	15	9	38	166	1,079	134	113	22
Missouri	—	2	4	2	8	34	175	66	895	242
North Dakota	9	28	12	25	74	157	542	308	44	88
South Dakota	—	—	14	—	14	1	20	3	6	2
Nebraska	2	30	5	29	66	8	78	4	NN	NN
Kansas	NN	NN	NN	NN	NN	NN	NN	NN	NN	NN
South Atlantic	106	141	163	283	693	1,944	3,878	2,525	2,689	2,929
Delaware	—	—	4	3	7	35	66	27	75	18
Maryland	—	1	1	5	7	311	55	404	72	276
District of Columbia	—	4	—	—	4	84	3	46	3	125
Virginia	23	23	20	*133	199	121	585	538	351	1,259
West Virginia	28	16	43	34	121	983	2,818	833	1,802	880
North Carolina	16	27	32	47	122	32	69	62	92	79
South Carolina	1	—	—	2	3	93	38	401	45	35
Georgia	—	—	8	—	8	28	94	64	6	51
Florida	38	70	55	59	222	257	150	150	243	206
East South Central	160	113	192	134	599	2,425	1,371	3,069	1,155	3,682
Kentucky	25	8	32	21	86	830	84	1,703	455	496
Tennessee	48	73	74	40	235	1,522	936	1,219	649	2,144
Alabama	30	4	32	52	118	30	223	96	34	554
Mississippi	57	28	54	21	160	43	128	51	17	488
West South Central	317	412	403	394	1,526	1,115	2,124	1,323	1,397	4,809
Arkansas	5	61	71	41	178	22	25	65	375	190
Louisiana	—	9	4	6	19	16	5	1	13	21
Oklahoma	51	44	6	47	148	10	21	16	6	97
Texas	261	298	322	300	1,181	1,067	2,073	1,241	1,003	4,501
Mountain	113	121	106	127	467	832	2,306	943	3,309	1,161
Montana	45	11	32	24	112	198	825	268	625	269
Idaho	6	16	6	7	35	200	360	140	267	195
Wyoming	—	—	—	—	—	12	56	12	314	55
Colorado	18	15	9	52	94	61	302	91	883	204
New Mexico	7	22	18	26	73	4	53	53	NN	NN
Arizona	22	21	12	11	66	327	57	255	569	282
Utah	4	—	6	2	12	26	650	88	646	130
Nevada	11	36	23	5	75	4	3	36	5	26
Pacific	272	284	257	384	1,197	1,160	2,171	3,746	2,444	4,254
Washington	159	110	160	248	677	346	623	1,455	552	1,694
Oregon	52	88	10	55	205	128	473	447	457	601
California	43	69	77	66	255	667	808	1,417	844	1,630
Alaska	18	13	8	7	46	1	25	400	47	304
Hawaii	—	4	2	8	14	18	242	27	544	25
Puerto Rico	43	7	63	53	166	248	105	272	74	407

*Includes delayed reports not allocated to week.

Figure 1
REPORTED CASES OF MEASLES IN TEXAS - January 1-28, 1967

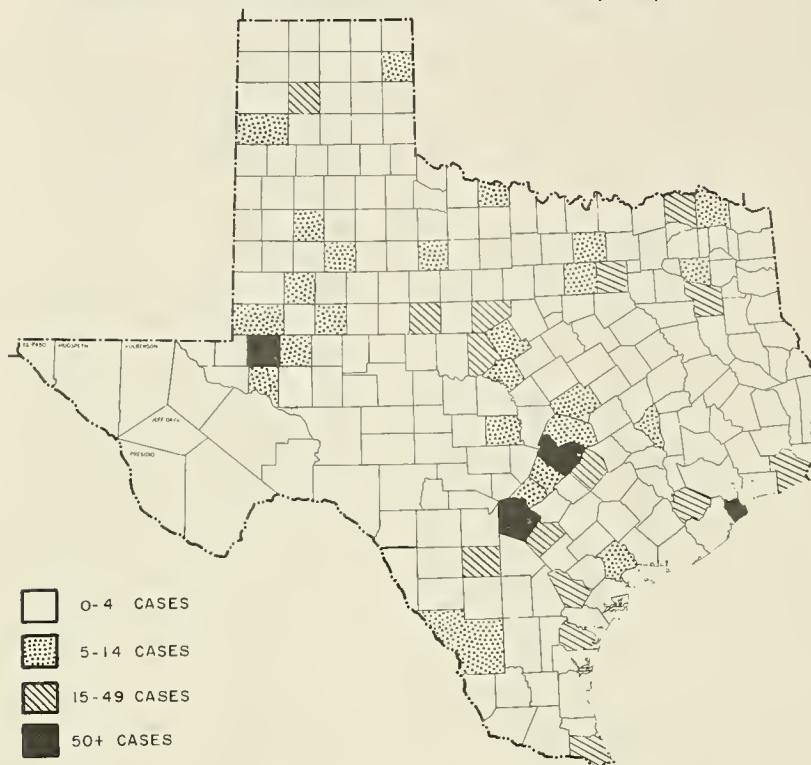
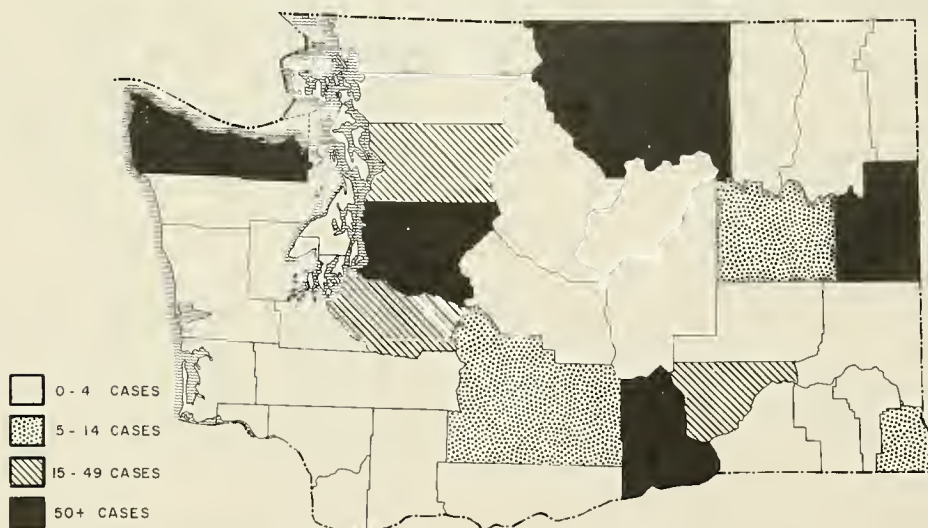


Figure 2
REPORTED CASES OF MEASLES IN WASHINGTON - January 1-28, 1967



MEASLES - 1967 - (Text continued from page 34)

Figures 3, 4, and 5 illustrate the secular trends of measles for the period 1962 through 1966 for the New England, Middle Atlantic, and South Atlantic Regions, respectively. In each figure the trends for individual states within each Region are compared with that for the Region as a whole. In the New England Region, the case rates for the 1965-66 epidemiologic year and the 1966-67 measles season to date are well below the previous non-epidemic year

case rates observed in 1963-64 and 1964-65. This general pattern of decline in measles incidence has occurred in each of the six states comprising the Region. In the Middle Atlantic and the South Atlantic Regions the incidence also has declined, but less dramatically than noted in the New England Region.

(Reported by the Childhood Viral Diseases Unit, Epidemiology Program, CDC.)

Figure 3
MEASLES RATES
BY FOUR-WEEK PERIODS
NEW ENGLAND REGION
BY STATES, 1962-1967

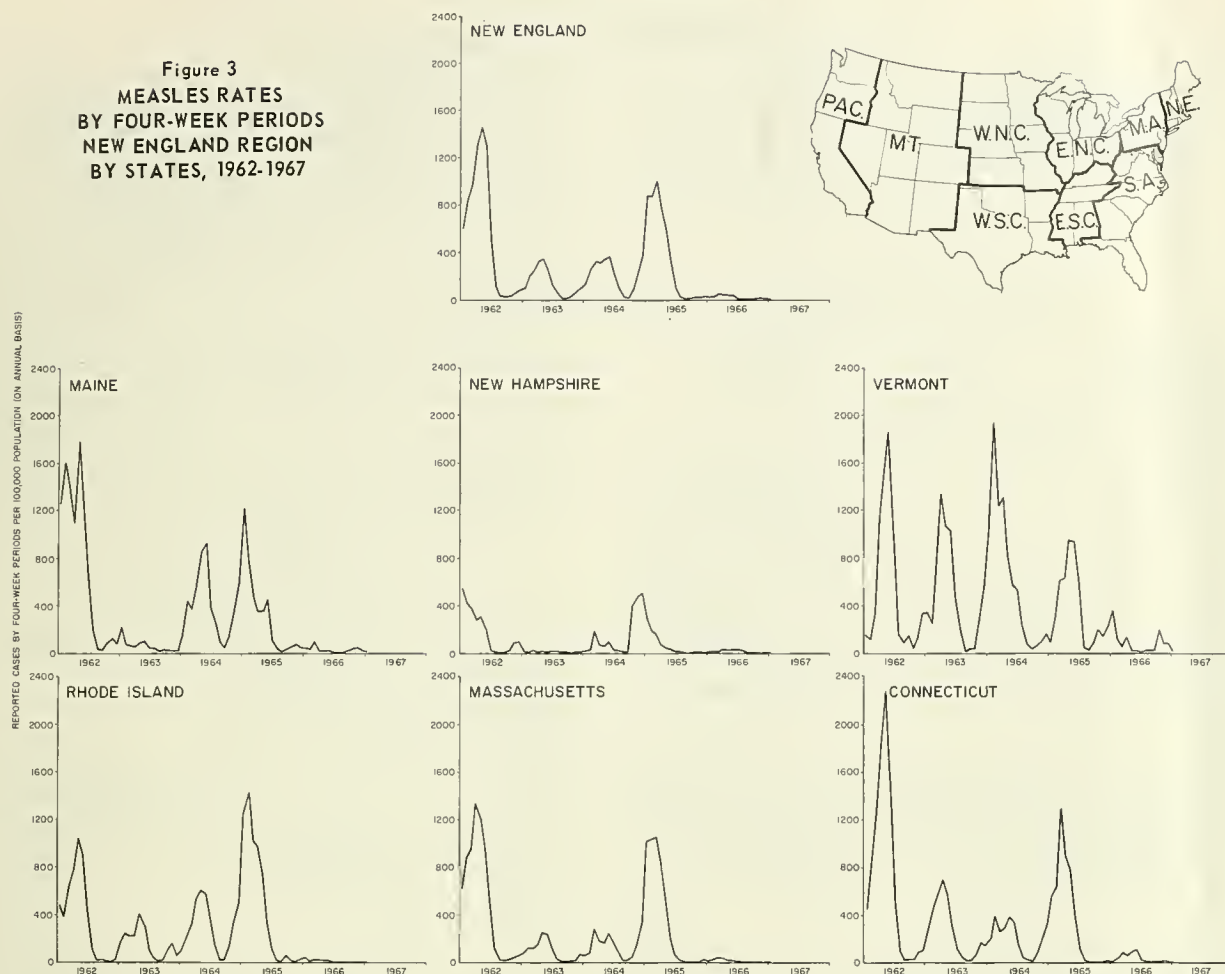
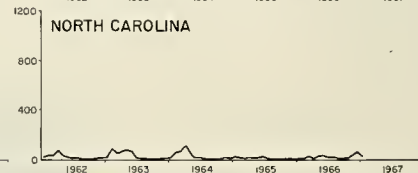
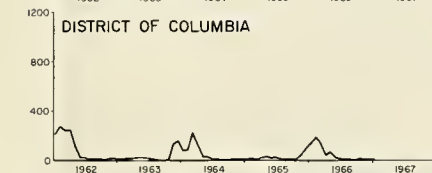
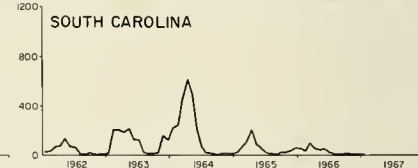
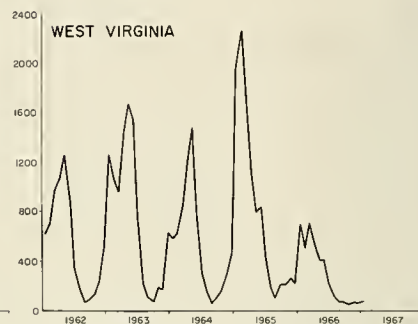
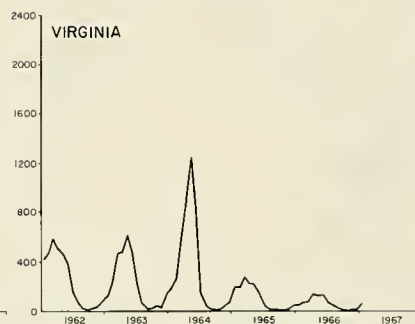
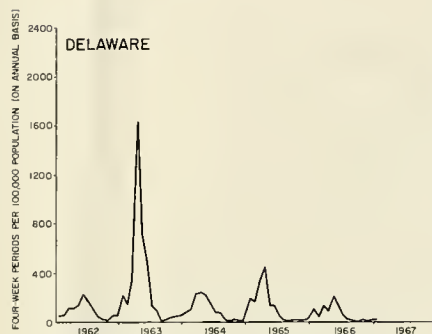
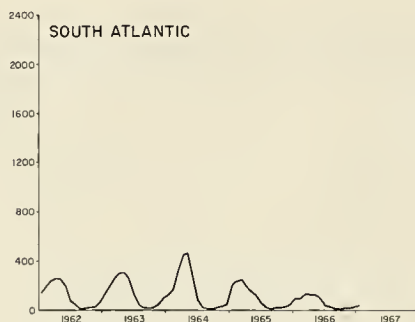


Figure 4
MEASLES RATES
BY FOUR-WEEK PERIODS
MIDDLE ATLANTIC REGION
BY STATES, 1962-1967



Figure 5
MEASLES RATES
BY FOUR-WEEK PERIODS
SOUTH ATLANTIC REGION
BY STATES, 1962-1967



REPORTED CASES OF POST-INFECTIONAL AND POST-IMMUNIZATION ENCEPHALITIS
FOURTH QUARTER ENDING DECEMBER 31, 1966 (Weeks 40-52)

State	Mumps	Measles	Chickenpox	Other specified
Arizona	1	.....	.....	.....
Arkansas .....	.....	.....	.....	Herpes Simplex-1
California	27	.....	1	.....
Connecticut	1	.....	.....	.....
Florida	12	2	.....	Herpes-2
Georgia	1	.....	.....	.....
Illinois	7	1	.....	Mononucleosis-1, Influenza-1
Maryland	3	.....	.....	.....
Massachusetts	4	.....	.....	.....
Michigan	9	1	2	.....
Minnesota	2	.....	1	Herpes-1
New York, Upstate	3	.....	1	.....
Pennsylvania	3	.....	1	.....
Tennessee	5	.....	.....	Pneumonia-1
Texas	4	1	.....	.....
Virginia	2	.....	.....	.....
Washington	1	2	1	.....
Fourth Quarter Total				
1966	85	7	7	
1965	67	12	7	
Cumulative Total (weeks 1-52)				
1966	428	166	77	
1965	424	106	79	

SURVEILLANCE SUMMARY

SALMONELLOSIS – November and December 1966

For the months of November and December 1966, the total numbers of salmonellae reported from human sources were 2,121 and 1,477, respectively. The cumulative number of 20,058 isolations recorded for the 12 months of 1966 represents a decrease of 4.0 percent from the total of 20,886 notified for 1965. The November weekly average of 424 isolations and the December one of 369 show increases of 8.0 and 0.5 percent, respectively, over the weekly averages of the same months in 1965. These weekly averages, which are less than those for the preceding 2 months, illustrate the expected seasonal pattern (Figure 6). The seven most frequently reported serotypes from human sources during November and December 1966 are listed in Table 2.

Reports of 1,026 nonhuman isolations represented by 70 serotypes were received from 37 states in November,

Table 2
Seven Most Frequently Reported Serotypes
from Human Sources
November and December 1966

Serotype	November			December		
	Rank	Number	Percent	Rank	Number	Percent
<i>S. typhi-murium</i> & <i>S. typhi-murium</i> var. <i>copenhagen</i>	1	628	29.6	1	442	29.9
<i>S. newport</i>	2	181	8.5	3	105	7.1
<i>S. heidelberg</i>	3	131	6.2	2	115	7.8
<i>S. enteritidis</i>	4	115	5.4	4	89	6.0
<i>S. infantis</i>	5	104	4.9	5	53	3.6
<i>S. saint-paul</i>	6	85	4.0	6	51	3.5
<i>S. blockley</i>	7	68	3.2	7	41	2.8
Total		1,312	61.8		896	60.7
Total all serotypes		2,121			1,477	

while 695 isolations representing 63 serotypes were sent by 35 states in December. The seven most frequently reported nonhuman serotypes are shown in Table 3.

(Reported by the Salmonella Unit, Bacterial Diseases Section, Epidemiology Program, CDC.)

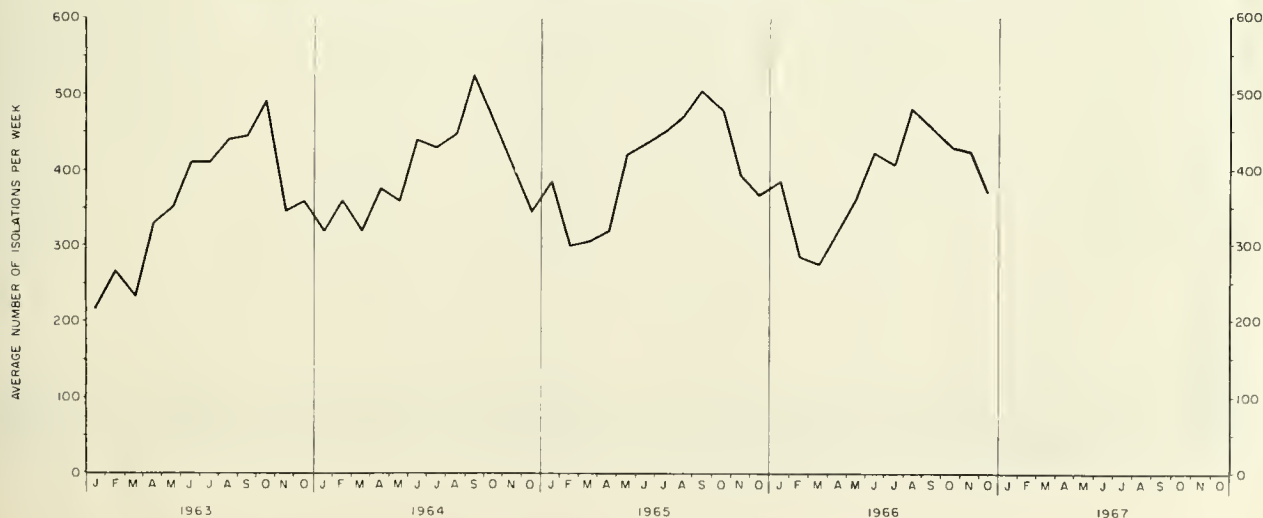
Table 3
Seven Most Frequently Reported Serotypes
from Nonhuman Sources
November and December 1966

Serotype	November			December		
	Rank	Number	Percent	Rank	Number	Percent
<i>S. heidelberg</i>	1	114	11.1	4	45	6.5
<i>S. typhi-murium</i> & <i>S. typhi-murium</i> var. <i>copenhagen</i>	1	114	11.1	1	72	10.4
<i>S. derby</i>	3	103	10.0			
<i>S. anatum</i>	4	94	9.2	6	34	4.9
<i>S. saint-paul</i>	5	53	5.2			
<i>S. schwarzengrund</i>	6	50	4.9	7	25	3.6
<i>S. infantis</i>	7	47	4.6	5	35	5.0
<i>S. cubana</i>				2	67	9.6
<i>S. eimsbuettel</i>				3	58	8.3
Total		575	56.1		336	48.3
Total all serotypes		1,026			695	

Most Common Sources of Nonhuman Isolations						
Swine	1	312	30.4	4	64	9.2
Turkey	2	215	21.0	1	99	14.2
Chicken	3	111	10.8	3	68	9.8
Animal feed	4	61	5.9			
Cattle	5	40	3.9			
Livestock feed				2	98	14.1
Carmin dye				5	51	7.3

Figure 6

REPORTED HUMAN ISOLATIONS OF SALMONELLA IN THE UNITED STATES



CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

FEBRUARY 4, 1967 AND FEBRUARY 5, 1966 (5th WEEK) - CONTINUED

AREA	MALARIA	MEASLES (Rubeola)		MENINGOCOCCAL INFECTIONS, TOTAL			POLIOMYELITIS			RUBELLA	
	1967	1967	Cumulative		1967	Cumulative		Total	Paralytic		1967
			1967	1966		1967	1966	1967	1967	Cum. 1967	
UNITED STATES...	53	2,205	7,798	26,003	51	286	354	-	-	-	849
NEW ENGLAND.....	2	36	83	372	2	9	20	-	-	-	129
Maine.....	-	-	5	39	-	1	-	-	-	-	40
New Hampshire.....	-	-	-	5	-	-	7	-	-	-	-
Vermont.....	-	9	13	117	-	-	1	-	-	-	2
Massachusetts.....	2	15	46	111	1	4	6	-	-	-	33
Rhode Island.....	-	4	6	29	-	-	2	-	-	-	11
Connecticut.....	-	8	13	71	1	4	4	-	-	-	43
MIDDLE ATLANTIC.....	10	85	325	3,994	6	43	62	-	-	-	32
New York City.....	-	10	44	1,964	2	9	14	-	-	-	18
New York, Up-State.....	1	16	84	504	1	12	12	-	-	-	14
New Jersey.....	5	21	98	329	3	17	19	-	-	-	-
Pennsylvania.....	4	38	99	1,197	-	5	17	-	-	-	-
EAST NORTH CENTRAL...	2	148	761	10,393	9	31	58	-	-	-	126
Ohio.....	2	13	70	604	3	12	20	-	-	-	9
Indiana.....	-	18	114	403	-	3	5	-	-	-	5
Illinois.....	-	15	77	2,151	2	6	6	-	-	-	16
Michigan.....	-	22	183	1,655	4	8	19	-	-	-	25
Wisconsin.....	-	80	317	5,580	-	2	8	-	-	-	71
WEST NORTH CENTRAL...	-	66	277	983	4	14	18	-	-	-	65
Minnesota.....	-	2	13	408	1	2	3	-	-	-	-
Iowa.....	-	10	48	274	-	2	4	-	-	-	65
Missouri.....	-	2	10	65	1	4	6	-	-	-	-
North Dakota.....	-	44	118	225	-	-	-	-	-	-	-
South Dakota.....	-	1	15	2	2	3	1	-	-	-	-
Nebraska.....	-	7	73	9	-	2	1	-	-	-	-
Kansas.....	-	NN	NN	NN	-	1	3	-	-	-	-
SOUTH ATLANTIC.....	9	310	1,003	2,431	8	52	65	-	-	-	58
Delaware.....	-	6	13	35	2	2	-	-	-	-	6
Maryland.....	-	6	13	390	1	7	8	-	-	-	1
Dist. of Columbia..	-	-	4	99	-	-	-	-	-	-	-
Virginia.....	-	43	242	186	-	6	5	-	-	-	3
West Virginia.....	-	114	235	1,191	-	8	3	-	-	-	5
North Carolina.....	-	103	225	35	-	9	13	-	-	-	-
South Carolina.....	1	1	4	115	-	2	13	-	-	-	-
Georgia.....	8	1	9	34	4	8	5	-	-	-	-
Florida.....	-	36	258	346	1	10	18	-	-	-	43
EAST SOUTH CENTRAL...	16	469	1,068	3,330	7	26	15	-	-	-	110
Kentucky.....	12	272	358	1,336	3	9	5	-	-	-	51
Tennessee.....	-	148	383	1,892	4	11	8	-	-	-	30
Alabama.....	4	41	159	41	-	2	2	-	-	-	29
Mississippi.....	-	8	168	61	-	4	-	-	-	-	-
WEST SOUTH CENTRAL...	2	463	1,989	1,648	8	47	35	-	-	-	4
Arkansas.....	-	21	199	23	-	-	4	-	-	-	-
Louisiana.....	-	-	19	18	5	22	8	-	-	-	-
Oklahoma.....	2	47	195	10	-	2	2	-	-	-	-
Texas.....	-	395	1,576	1,597	3	23	21	-	-	-	4
MOUNTAIN.....	-	134	601	1,117	2	8	14	-	-	-	65
Montana.....	-	12	124	233	-	-	2	-	-	-	3
Idaho.....	-	17	52	224	-	1	-	-	-	-	-
Wyoming.....	-	12	12	19	-	-	-	-	-	-	-
Colorado.....	-	12	106	109	2	3	10	-	-	-	33
New Mexico.....	-	23	96	4	-	3	1	-	-	-	-
Arizona.....	-	26	92	488	-	-	-	-	-	-	22
Utah.....	-	7	19	36	-	-	-	-	-	-	7
Nevada.....	-	25	100	4	-	1	1	-	-	-	-
PACIFIC.....	12	494	1,691	1,735	5	56	67	-	-	-	260
Washington.....	2	271	948	534	-	1	5	-	-	-	70
Oregon.....	2	36	241	180	1	5	3	-	-	-	17
California.....	7	181	436	999	4	48	49	-	-	-	168
Alaska.....	1	2	48	2	-	2	8	-	-	-	-
Hawaii.....	-	4	18	20	-	-	2	-	-	-	5
Puerto Rico.....	-	74	240	278	-	1	-	-	-	-	1

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED

FEBRUARY 4, 1967 AND FEBRUARY 5, 1966 (5th WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1967	1967	Cum. 1967	1967	Cum. 1967	1967	Cum. 1967	1967	Cum. 1967	1967	Cum. 1967
UNITED STATES...	11,827	3	13	-	13	9	27	-	4	69	352
NEW ENGLAND.....	2,626	-	-	-	-	-	-	-	-	-	1
Maine.....	96	-	-	-	-	-	-	-	-	-	1
New Hampshire.....	34	-	-	-	-	-	-	-	-	-	-
Vermont.....	76	-	-	-	-	-	-	-	-	-	-
Massachusetts.....	426	-	-	-	-	-	-	-	-	-	-
Rhode Island.....	177	-	-	-	-	-	-	-	-	-	-
Connecticut.....	1,817	-	-	-	-	-	-	-	-	-	-
MIDDLE ATLANTIC.....	404	1	1	-	-	1	5	-	-	-	9
New York City.....	19	-	-	-	-	1	3	-	-	-	-
New York, Up-State.....	275	-	-	-	-	-	1	-	-	-	6
New Jersey.....	NN	-	-	-	-	-	-	-	-	-	-
Pennsylvania.....	110	1	1	-	-	-	1	-	-	-	3
EAST NORTH CENTRAL...	1,183	-	-	-	2	-	1	-	-	4	17
Ohio.....	171	-	-	-	-	-	1	-	-	2	10
Indiana.....	245	-	-	-	-	-	-	-	-	1	3
Illinois.....	130	-	-	-	2	-	-	-	-	-	3
Michigan.....	296	-	-	-	-	-	-	-	-	1	1
Wisconsin.....	341	-	-	-	-	-	-	-	-	-	-
WEST NORTH CENTRAL...	637	-	1	-	3	-	-	-	-	24	110
Minnesota.....	26	-	1	-	-	-	-	-	-	6	26
Iowa.....	246	-	-	-	-	-	-	-	-	6	13
Missouri.....	31	-	-	-	1	-	-	-	-	2	25
North Dakota.....	158	-	-	-	-	-	-	-	-	8	21
South Dakota.....	16	-	-	-	-	-	-	-	-	1	11
Nebraska.....	2	-	-	-	-	-	-	-	-	-	4
Kansas.....	158	-	-	-	2	-	-	-	-	1	10
SOUTH ATLANTIC.....	1,034	1	3	-	2	-	1	-	3	5	41
Delaware.....	47	-	-	-	-	-	-	-	-	-	-
Maryland.....	298	-	-	-	-	-	-	-	-	-	-
Dist. of Columbia..	6	-	-	-	-	-	-	-	-	-	-
Virginia.....	227	1	2	-	-	-	-	-	-	4	21
West Virginia.....	233	-	-	-	-	-	-	-	-	-	6
North Carolina.....	18	-	-	-	-	-	1	-	2	-	-
South Carolina.....	31	-	-	-	2	-	-	-	-	-	-
Georgia.....	8	-	-	-	-	-	-	-	1	1	9
Florida.....	166	-	1	-	-	-	-	-	-	-	5
EAST SOUTH CENTRAL...	1,825	-	3	-	2	1	4	-	1	16	82
Kentucky.....	392	-	-	-	-	-	-	-	-	5	22
Tennessee.....	1,105	-	3	-	2	-	1	-	1	10	58
Alabama.....	125	-	-	-	-	1	3	-	-	1	1
Mississippi.....	203	-	-	-	-	-	-	-	-	-	1
WEST SOUTH CENTRAL...	866	1	1	-	1	4	8	-	-	18	66
Arkansas.....	32	-	-	-	-	-	-	-	-	3	11
Louisiana.....	-	-	-	-	-	4	8	-	-	1	6
Oklahoma.....	76	-	-	-	1	-	-	-	-	4	15
Texas.....	758	1	1	-	-	-	-	-	-	10	34
MOUNTAIN.....	1,290	-	-	-	3	-	2	-	-	-	7
Montana.....	53	-	-	-	1	-	1	-	-	-	-
Idaho.....	194	-	-	-	-	-	-	-	-	-	-
Wyoming.....	105	-	-	-	-	-	-	-	-	-	-
Colorado.....	372	-	-	-	-	-	-	-	-	-	-
New Mexico.....	283	-	-	-	-	-	-	-	-	-	4
Arizona.....	142	-	-	-	-	-	1	-	-	-	3
Utah.....	139	-	-	-	2	-	-	-	-	-	-
Nevada.....	2	-	-	-	-	-	-	-	-	-	-
PACIFIC.....	1,962	-	4	-	-	3	6	-	-	2	19
Washington.....	736	-	-	-	-	-	-	-	-	-	-
Oregon.....	69	-	-	-	-	-	-	-	-	-	-
California.....	1,015	-	3	-	-	3	6	-	-	2	19
Alaska.....	58	-	-	-	-	-	-	-	-	-	-
Hawaii.....	84	-	1	-	-	-	-	-	-	-	-
Puerto Rico.....	4	-	-	-	-	-	2	-	-	1	1

Week No.

DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED FEBRUARY 4, 1967

5

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes	Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over				All Ages	65 years and over		
NEW ENGLAND:	713	454	36	30	SOUTH ATLANTIC:	1,155	622	67	53
Boston, Mass.-----	246	142	10	11	Atlanta, Ga.-----	118	60	5	6
Bridgeport, Conn.*----	41	26	4	2	Baltimore, Md.-----	260	129	14	12
Cambridge, Mass.-----	31	24	-	-	Charlotte, N. C.-----	41	28	1	1
Fall River, Mass.-----	29	20	1	-	Jacksonville, Fla.-----	78	39	3	4
Hartford, Conn.-----	56	33	1	5	Miami, Fla.-----	94	57	1	3
Lowell, Mass.-----	26	18	3	2	Norfolk, Va.-----	57	24	3	3
Lynn, Mass.-----	18	12	1	1	Richmond, Va.-----	81	42	6	3
New Bedford, Mass.-----	21	15	-	-	Savannah, Ga.-----	45	24	6	1
New Haven, Conn.-----	53	32	-	2	St. Petersburg, Fla.-----	82	70	8	1
Providence, R. I.-----	57	32	6	1	Tampa, Fla.-----	70	44	8	2
Somerville, Mass.-----	14	11	1	-	Washington, D. C.-----	188	85	10	14
Springfield, Mass.-----	38	34	4	1	Wilmington, Del.-----	41	20	2	3
Waterbury, Conn.-----	28	17	-	2	EAST SOUTH CENTRAL:	646	333	39	45
Worcester, Mass.-----	55	38	5	3	Birmingham, Ala.-----	103	39	-	14
MIDDLE ATLANTIC:	3,327	1,966	140	157	Chattanooga, Tenn.-----	57	31	4	2
Albany, N. Y.-----	54	21	1	9	Knoxville, Tenn.-----	41	23	1	1
Allentown, Pa.-----	36	21	1	2	Louisville, Ky.-----	109	71	14	6
Buffalo, N. Y.-----	146	90	6	6	Memphis, Tenn.-----	152	79	7	10
Camden, N. J.-----	45	30	3	5	Mobile, Ala.-----	37	18	2	2
Elizabeth, N. J.-----	38	21	2	1	Montgomery, Ala.-----	44	28	4	2
Erie, Pa.-----	45	31	3	-	Nashville, Tenn.-----	103	44	7	8
Jersey City, N. J.-----	69	43	5	3	WEST SOUTH CENTRAL:	1,121	585	49	74
Newark, N. J.-----	76	35	5	7	Austin, Tex.-----	51	24	1	4
New York City, N. Y.-----	1,636	961	71	69	Baton Rouge, La.-----	39	21	1	2
Paterson, N. J.-----	35	24	6	3	Corpus Christi, Tex.-----	30	11	-	5
Philadelphia, Pa.-----	584	343	15	22	Dallas, Tex.-----	160	80	7	12
Pittsburgh, Pa.-----	188	97	2	10	El Paso, Tex.-----	35	17	3	4
Reading, Pa.-----	51	36	1	2	Fort Worth, Tex.-----	83	43	3	5
Rochester, N. Y.-----	95	57	6	7	Houston, Tex.-----	198	103	8	14
Schenectady, N. Y.-----	13	8	1	1	Little Rock, Ark.-----	52	23	5	3
Scranton, Pa.-----	48	31	3	2	New Orleans, La.-----	161	75	8	13
Syracuse, N. Y.-----	51	33	3	4	Oklahoma City, Okla.-----	93	60	2	1
Trenton, N. J.-----	46	31	2	1	San Antonio, Tex.-----	103	59	4	2
Utica, N. Y.-----	29	18	2	1	Shreveport, La.-----	45	27	4	3
Yonkers, N. Y.-----	42	35	2	2	Tulsa, Okla.-----	71	42	3	6
EAST NORTH CENTRAL:	2,627	1,463	87	122	MOUNTAIN:	390	240	24	20
Akron, Ohio-----	55	32	-	8	Albuquerque, N. Mex.-----	45	26	8	1
Canton, Ohio-----	29	20	1	1	Colorado Springs, Colo.-----	13	11	-	-
Chicago, Ill.-----	838	445	45	32	Denver, Colo.-----	95	55	4	5
Cincinnati, Ohio-----	172	112	5	3	Ogden, Utah-----	20	12	3	3
Cleveland, Ohio-----	226	114	2	24	Phoenix, Ariz.-----	100	60	4	3
Columbus, Ohio-----	122	58	3	6	Pueblo, Colo.-----	19	12	2	-
Dayton, Ohio-----	65	33	3	3	Salt Lake City, Utah-----	49	33	1	3
Detroit, Mich.-----	343	175	3	24	Tucson, Ariz.-----	49	31	2	5
Evansville, Ind.-----	31	22	1	-	PACIFIC:	1,866	1,121	70	96
Flint, Mich.-----	45	19	-	1	Berkeley, Calif.-----	24	17	-	-
Fort Wayne, Ind.-----	48	26	3	-	Fresno, Calif.-----	37	20	-	3
Gary, Ind.-----	21	14	-	-	Glendale, Calif.-----	44	33	1	-
Grand Rapids, Mich.-----	51	33	6	3	Honolulu, Hawaii-----	54	26	1	6
Indianapolis, Ind.-----	138	81	4	9	Long Beach, Calif.-----	100	60	10	5
Madison, Wis.-----	39	25	-	1	Los Angeles, Calif.-----	606	363	24	27
Milwaukee, Wis.-----	145	93	-	1	Oakland, Calif.-----	113	65	6	5
Peoria, Ill.-----	44	26	-	1	Pasadena, Calif.-----	44	30	-	2
Rockford, Ill.-----	27	16	6	2	Portland, Oreg.-----	126	80	1	8
South Bend, Ind.-----	38	21	1	-	Sacramento, Calif.-----	84	55	3	6
Toledo, Ohio-----	86	54	3	3	San Diego, Calif.-----	111	67	1	10
Youngstown, Ohio-----	64	44	1	-	San Francisco, Calif.-----	223	122	10	15
WEST NORTH CENTRAL:	821	477	40	41	San Jose, Calif.-----	52	31	6	1
Des Moines, Iowa-----	60	33	3	3	Seattle, Wash.-----	158	90	6	7
Duluth, Minn.-----	7	7	-	-	Spartanburg, S.C.-----	43	33	-	-
Kansas City, Kans.-----	13	5	-	1	Tacoma, Wash.-----	47	29	1	1
Kansas City, Mo.-----	156	91	4	8	Total	12,666	7,261	552	638
Lincoln, Nebr.-----	36	24	3	-	Cumulative Totals				
Minneapolis, Minn.-----	111	78	4	4	including reported corrections for previous weeks				
Omaha, Nebr.-----	84	49	1	6	All Causes, All Ages -----	66,963			
St. Louis, Mo.-----	237	119	17	12	All Causes, Age 65 and over-----	38,578			
St. Paul, Minn.-----	74	46	4	3	Pneumonia and Influenza, All Ages-----	2,789			
Wichita, Kans.-----	43	25	4	4	All Causes, Under 1 Year of Age-----	3,433			

*Estimate - based on average percent of divisional total.



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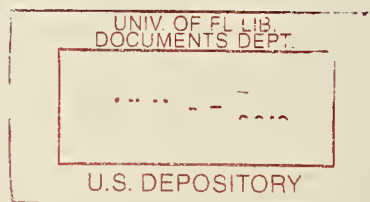
DAVID J. SENCER, M.O.
A.O. LANGMUIR, M.O.
JOA L. SHERMAN, M.S.

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THE EDITOR
MORBIDITY AND MORTALITY WEEKLY REPORT
NATIONAL COMMUNICABLE DISEASE CENTER
ATLANTA, GEORGIA 30333

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE NCOC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON SATURDAY; COMPILED DATA ON A NATIONAL BASIS ARE RELEASED ON THE SUCCEEDING FRIDAY.

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